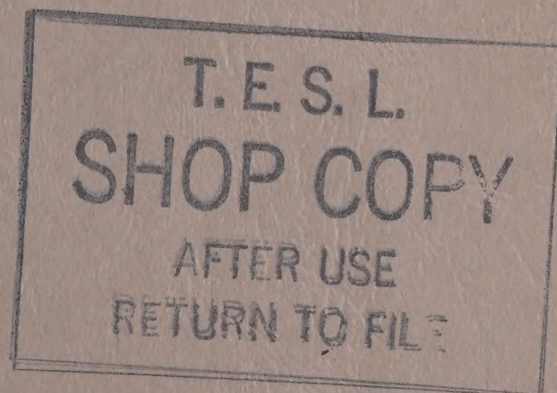


AMEL

INSTRUCTION MANUAL
FOR
REGULATED POWER SUPPLY MODEL 200-B



ELECTRONIC MEASUREMENTS COMPANY, INC.

EATONTOWN

NEW JERSEY

OPERATING INSTRUCTIONS

MODEL 200-B POWER SUPPLY

SPECIFICATIONS

Output Voltages: 0-325 volts D.C. at 125 MA regulated,
either positive or negative grounded.
6.3 volts A.C. at 6 amps unregulated.

Regulation: Within 1% for voltages between 20-325 volts,
from no load to full load.

Within 2% at 10 volts from no load to full
load.

Hum Voltages: Less than 10 millivolts.

Controls:

1. On-Off A.C. Switch.
2. D.C. Output Switch.
3. Voltage Control.

Tubes:

- | | | |
|---|---|------------|
| 1 | - | 5U4G |
| 1 | - | 6X5GT |
| 1 | - | 6SL7GT |
| 1 | - | 6SH7 |
| 3 | - | 6V6 |
| 2 | - | VR-150/OD3 |

Meters:

0-500 Volts D.C.
0-150 MA D.C.

Input Voltage: 115 volts A.C. - 60 cycles.

Power Consumption: 220 watts at full load.

Mounting: Universal rack or table mounting.

Dimensions:

Height	-	7 inches
Length	-	19 inches
Depth	-	11 inches

Net Weight: 40 lbs.

OPERATION

Before operating the unit, it should be inspected to insure that all tubes are securely in their sockets. The unit may be opened for inspection by removing the four screws at the rear and sliding the dust cover backwards. When this check has been made, replace the cover and screws.

Next, the two panel switches should be operated to the "Off" position (downwards), and the voltage control potentiometer should be turned to the minimum voltage position (maximum counterclockwise). The unit may then be plugged into the power line and the A.C. switch (lower left hand side of panel) operated to the "On" position. When being operated for the first time, about fifteen minutes of warm-up time should be allowed. Subsequently, this may be reduced to five minutes. The D.C. output switch should then be operated to the "On" position. The output voltage may be adjusted to the value desired by setting the output voltage control.

The load circuit may be connected either to the binding posts on the front panel or to the socket on the rear of the cabinet. In the interests of safety it is advisable to make all connections with the D.C. output switch in the "Off" position.

ADJUSTMENTS

A control is provided to adjust the voltage range of the supply. This control may be found on the chassis behind the 6V6 tubes and may be reached by removing the top cover. In

some cases, aging of the circuit resistors or of the VR tubes, or the replacement of a tube may result in a change in the voltage range. This will be manifested by a considerable positive or negative voltage with the output voltage control set to minimum. Generally about fifteen minutes of warm-up time should be allowed before adjustments are made. The power supply should then be connected to a meter having a 10 volt D.C. scale, and the panel voltage control should be set to the maximum counterclockwise position. The chassis control should then be rotated slowly to obtain a voltage of about minus 2 volts. This is done so that with drift due to aging or other causes a voltage of zero may be attained without readjustment over long periods of time. In some cases it may be useful to set the lower limit at some positive value. This may be done if desired. After the adjustment has been completed, the cover should be replaced.

MAINTENANCE NOTES

Line Voltage:

This supply will provide the specified voltages and regulation over a line voltage range of from below 110 to 125 volts. Over this range the change in output voltage at full load is within 1% for voltages above 30 volts and within 2% for voltages between 10 and 30 volts. However, it is recommended that the supply not be used for long periods with line voltages over 115 volts when using a very low voltage output at full load current. Shortened tube life may result.

Stability:

Some change in voltage during the first 5 or 10 minutes of operation may be considered normal. After the warm-up period the stability of the output voltage will be found to be good for voltages above 30 volts. For voltages below 30 volts and especially for voltages of 10 volts or lower, drift of the output voltage may occur. Over a period of time this may amount to as much as 1 volt at 10 volts output. This will be worse at the lower voltages and less severe at the higher voltages. For this reason it is recommended that the supply not be used for small amounts of bias voltage for long periods without checking.

Tubes:

The tubes in this supply may be replaced by standard types. It will be found that the VR-150 regulator tubes are subject to aging. This will result in a change of voltages obtained with given settings of the voltage control, especially for voltages below 30 volts. A check of the VR tube voltages may be made to determine the approximate condition. The voltage across each tube should be between 147 and 165 volts.

W A R R A N T Y

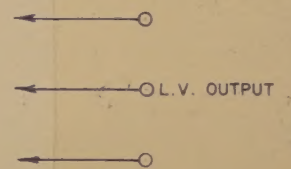
Our instruments are guaranteed to be free from defects in material and workmanship for one year from the date of purchase (except for tubes, fuses and batteries). Our liability under this warranty is limited to repairs and adjustments or replacements of defective parts or instruments when the fault is a direct result of defective materials or workmanship in the manufacture of the apparatus. This warranty covers service for the first year, except for transportation to the factory.

If, during subsequent service, any fault develops in the equipment, the following steps should be taken:

1. Notify us, giving full particulars of the difficulty and include the serial number of the instrument in question. On receipt of this information, we will give you service information or shipping instructions.
2. On receipt of shipping instructions, forward the apparatus to us, prepaid, and we will make repairs and adjustments immediately at the factory.
3. If the fault has been caused by misuse, or abnormal conditions of operation, as disclosed by our examination, repairs will be billed at cost. In this case, an estimate of the cost will be submitted before the work is started.

CLAIM FOR DAMAGE IN SHIPMENT

The instrument should be tested as soon as it is received. If it fails to operate properly or is damaged in any way, a claim should be filed with the carrier. A full report of the damage should be obtained by the claim agent and this report should be forwarded to us. We will then advise you of the disposition to be made of the equipment and arrange for repair or replacement. When referring to this instrument, always include the model and serial numbers.



ISSUE - 1

